

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Review of the Commission's Rules Governing	)	WT Docket No. 17-200
The 896-901/935-940 MHz Band	)	

**REPLY COMMENTS OF THE CITY OF LOS ANGELES  
DEPARTMENT OF WATER AND POWER**

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## **EXECUTIVE SUMMARY**

The City of Los Angeles Department of Water and Power (“LADWP”) submits these Reply Comments to elevate for the Commission’s attention the significant concerns about the impact of its 900 MHz realignment plan on narrowband incumbents to be found in the record. This is a critical concern for utilities like LADWP which provide critical infrastructure services to tens of millions of Americans nationwide and should therefore be a critical concern for the Commission.

The record is clear. Incumbents like LADWP will be impacted significantly from band realignment. Moreover, the Commission’s proposals are fundamentally inconsistent with ensuring meaningful protections for incumbents and the preservation of future narrowband growth. The costs of realignment will be real, and the record is unequivocal – utilities and their ratepayers must not bear the financial or operational burdens of a policy framework which denies them access to spectrum while directing the bulk of benefits to a single commercial entity.

While broadband may be important for some utilities, the record shows that it not a universally held position. Decades of experience have shown utilities are consistently best served by the ability to self-provision services, rather than be dependent on commercial operators whose needs and priorities differ from utilities. Any Commission framework should therefore:

1. Ensure that any transition will be at all times voluntary, and will not give cause increased interference to vital, sensitive narrowband operations, or limit their growth. The costs of transition must be borne by broadband licensees.
2. Ensure that utilities – not just wireless companies – have direct access to broadband spectrum, and are given priority access to those resources. Any other result will find

the Commission picking winners and losers in the marketplace, and granting unfair windfalls at the expense of the public interest.

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**I. INTRODUCTION**

The City of Los Angeles Department of Water and Power<sup>1</sup> (“LADWP” or “Department”) submits these Reply Comments in response to the Commission’s Notice of Proposed Rulemaking<sup>2</sup> (“NPRM”) concerning the 896-901/935-940 MHz band (the “Band”) and to address the comments of others in the docket.<sup>3</sup> The record reflects near-universal agreement on the need and importance of protecting the operations of 900 MHz narrowband incumbents such as LADWP, and the need to ensure that any future broadband deployments in the Band impose neither operational nor financial burdens on narrowband incumbents.

LADWP is the nation’s largest municipal utility. It is in this capacity that the Department urges the Commission to recognize that certain aspects of its proposal, including, but not limited

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<sup>1</sup> LADWP is a department organized and existing under the Charter of the City of Los Angeles, a municipal corporation of the State of California. The mission of the LADWP is “Providing clean, reliable water and power and excellent customer service in a safe, environmentally responsible and cost-effective manner.” Detailed information about our mission, our leadership and our programs may be found at [www.ladwp.com](http://www.ladwp.com).

<sup>2</sup> *In the Matter of Review of the Commission’s Rules Governing the 896-901/935-940 MHz Band*, Notice of Proposed Rulemaking, FCC 19-18 (rel. Mar. 14, 2019) (“NPRM”).

<sup>3</sup> Unless otherwise specified, references in these Reply Comments to “Comments” of any particular party refer to submissions filed on or around June 3, 2019 in the above-captioned docket.

to, the size of the initial broadband allocation<sup>4</sup> and its eligibility rules<sup>5</sup> must be revised to avoid harm to existing operators and unfair windfalls to new entrants.

## **II. 900 MHZ NARROWBAND COMMUNICATIONS REMAIN ESSENTIAL FOR CRITICAL INFRASTRUCTURE PROVIDERS, AND SELF-PROVISIONING IS ESSENTIAL.**

### ***A. 900 Mhz Narrowband Operations Are Critical To Infrastructure Industries.***

The record demonstrates the significance of 900 MHz narrowband operations in critical infrastructure industries which lack alternatives in other bands. Oncor, for example, operates the largest electric transmission and distribution network in Texas, covering “more than 110 counties and more than 400 incorporated municipalities.”<sup>6</sup> Oncor, like LADWP, serves “a territory that covers very rural areas and also metropolitan areas” and relies on an extensive 900 MHz narrowband network to support its operations.<sup>7</sup> Santee Cooper’s 900 MHz network provides “system-wide voice coverage for nearly 3,200 Santee Cooper and Central-member cooperative” radio users.<sup>8</sup> NextEra Energy, which owns Florida Power and Light Company, relied on its 900 MHz network to “help restore power to more than 4.4 million electrical customers in 10 days” following Hurricane Irma’s landfall in Florida.<sup>9</sup> And the Lower Colorado River Authority’s 900 MHz system “covers 61 counties and almost 50,000 square miles,” serving “more than 8,800 mobile radio users” daily.<sup>10</sup>

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<sup>4</sup> See NPRM at ¶ 11.

<sup>5</sup> *Id.* at ¶ 29.

<sup>6</sup> Oncor Comments at 2.

<sup>7</sup> *Id.*

<sup>8</sup> Critical Infrastructure Coalition Comments at 3 (“CIC Comments”).

<sup>9</sup> *Id.*

<sup>10</sup> Lower Colorado River Authority Comments at 2 (“LCRA Comments”).

UTC documents that not just Oncor, LADWP, Santee Cooper, and Florida Power and Light, but many “utilities rely on these networks” and moreover that utilities “lack reasonable alternatives” in the event narrowband operations are disrupted.<sup>11</sup> LADWP agrees. Disruption to 900 MHz narrowband systems like LADWP’s “jeopardizes electric utilities [and] water authorities [...] that use this spectrum for critical public safety, nuclear power plant security, utility service restoration and maintenance, smart grid applications, and emergency communications.”<sup>12</sup> The “hundreds of millions of dollars”<sup>13</sup> invested in these networks by utilities continue to bear fruit to this day, and LADWP strongly supports views in the record that the Commission must emphasize protection for these operations in any eventual rules.

***B. Utilities Often Lack Commercial Alternatives For Communications Services Provided By 900 Mhz Narrowband Systems.***

The record also makes clear that utilities’ communications needs are rarely met by commercially available services and that, for a variety of reasons, utilities are often best served by self-provisioning to meet their communications needs. Oncor notes that its requirements “could not be solely supplied by commercial wireless carriers” because its “signal coverage in certain areas is more extensive than commercial carriers.”<sup>14</sup> LADWP faces similar challenges in its projects in the Owens Valley, where commercial service is simply unavailable. Emergency response is critical, as well – utility communications must remain operational when disaster strikes, and reliance on a third party’s disaster response practices as a predicate to safe and efficient restoration of the power grid is simply not feasible. And as Southern California Edison

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<sup>11</sup> UTC Comments at 3.

<sup>12</sup> CIC Comments at 4.

<sup>13</sup> UTC Comments at 3.

<sup>14</sup> Oncor Comments at 3.

(“SCE”) notes, “historically, commercial operators have demonstrated little understanding of the specialized communications needs of utilities, driving the need for utilities to build and operate their own critical infrastructure communications networks.”<sup>15</sup> LADWP shares this experience, and the record provides no evidence – either from the Commission or from the single provider likely to benefit from the Commission’s current proposal – that this situation is any different. LADWP strongly associates itself with those comments in the record which emphasize preservation of the ability for utilities to self-provision both narrowband systems in the current and foreseeable future, and broadband networks in the longer term, rather than be forced to rely on third parties who lack the understanding and incentive to meet the needs of utilities.

### **III. NEARLY ALL COMMENTERS AGREE THAT INCUMBENT PROTECTION MUST BE A PRIORITY IN PURSUING BAND REALIGNMENT.**

The record is virtually unanimous. Protection of incumbents’ operations must be a priority.<sup>16</sup> pdvWireless, which stands to benefit directly and potentially exclusively from the Commission’s proposal, even acknowledges the importance of incumbent protections.<sup>17</sup>

Commercial wireless carriers frequently fail to understand the unique operational challenges faced by utilities. LADWP shares the views of other commenters that, even as the Band is pushed toward broadband, protection of narrowband operations – not only those currently deployed, but necessary growth as well – must be a priority.<sup>18</sup>

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<sup>15</sup> SCE Comments at 10.

<sup>16</sup> See CIC Comments at 3; Oncor comments at ii-iii; LCRA Comments at 25-26.

<sup>17</sup> pdvWireless Comments at 4 (“...narrowband versus broadband need not be a binary choice.”)

<sup>18</sup> See, e.g. Oncor Comments at 12; LCRA Comments at 4.



**A. *Broadband Segment Size.***

LADWP continues to harbor substantial concerns about the impact of the Commission's proposed 3/3 MHz broadband license size. In addition to effectively prohibiting future growth of narrowband operations in already congested markets, the 3/3 MHz realignment size may preclude relocation for complex systems or high-demand markets – those most valuable to potential broadband licensees.<sup>19</sup> LADWP strongly supports those commenters proposing an expansion of the scope of the “complex systems” exception described in the Commission's rules.<sup>20</sup> LADWP's system, which serves more than 5,000 users in the LA Basin and Owens Valley areas, and supports the nation's largest municipal utility, would not qualify for the narrow “complex system” protection the Commission has proposed, and LADWP urges greater protection for incumbents like itself. While the broadband needs of some utilities are more immediate, that is not universally true, and the Commission must not ignore the reality that one size does not fit all in the critical infrastructure space.<sup>21</sup>

**B. *LADWP Supports A Smaller, 1.4/1.4 Mhz Configuration In Congested Markets.***

LADWP remains opposed to the Commission's 3/3 MHz band plan, due to the severe impacts it will have on a wide array of narrowband incumbents both in the near and long terms. To the extent the Commission nevertheless moves forward, however, LADWP strongly supports the proposals by UTC and others to permit a smaller, 1.4/1.4 MHz configuration in more congested markets where the 3/3 MHz plan would prohibit future narrowband growth or would

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<sup>19</sup> See, e.g. LCRA Comments at 4 (describing the impossibility of compressing LCRA's existing network into the remaining narrowband capacity under the Commission's proposal, and the need to preserve room for future narrowband growth.)

<sup>20</sup> See NPRM at ¶ 38; LCRA Comments at 10.

<sup>21</sup> See, e.g. LCRA Comments at 14 (describing the inadequacy of the proposed 900 MHz realignment to meet LCRA's anticipated broadband needs).

force relocation of incumbents or hamper incumbent operations.<sup>22</sup> While LADWP does not have an immediate-term need for broadband, it recognizes that, as those technologies tailored to the unique needs of utilities develop in the future, spectrum will need to be available. LADWP does not believe, however, that those needs are either so urgent for all utilities, or so deserving of singular attention, as to justify degradation of narrowband operations and growth potential.<sup>23</sup> It must be emphasized, furthermore, that none of the proposals for band realignment are painless for LADWP – while the 1.4/1.4 MHz plan is less harmful, it is not without downside.

One need that is more urgent, however, is the lifting of the Commission’s freeze on narrowband license applications. LADWP shares the view of many utility commenters that the ongoing “temporary” freeze on applications is both detrimental to utility operations on an ongoing basis, and fundamentally inconsistent with a policy which includes any flexibility for utilities. Resuming processing of narrowband applications will allow utilities to continue to develop narrowband operations which both the Commission and commenters in the record recognize have significant ongoing value, and will prevent the realignment of the Band from imposing a *de facto* limit on narrowband operations.

In so doing, however, the Commission should not permit SMR licensees to access additional narrowband spectrum. Utilities and other existing operators are the primary active users of the Band, and permitting SMR licensees to *expand* their footprint in the band by accessing narrowband spectrum will only impose further limitations on utility operations in the

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<sup>22</sup> See UTC Comments at 7; LCRA Comments at 4 (describing the impossibility of fitting existing narrowband operations into the remaining 2/2 MHz narrowband segment under the Commission’s proposed plan.)

<sup>23</sup> See LCRA Comments at 15 (“It is, in fact, unclear what needs would actually be served by such a small broadband segment.”)

future. The Commission's plan for the Band must protect incumbent needs in the present and the future in deed, not only in word.

***C. A Voluntary, No-Cost Transition Is Essential To Success.***

The record is unequivocal that no matter the approach the Commission pursues, incumbents must not be made to bear the burden of the Commission's policy.<sup>24</sup> While LADWP recognizes pdv's inherent interest in seeing the Commission force incumbents to redesign their networks to accommodate its broadband plans,<sup>25</sup> convenience and business preference for one company cannot outweigh the harm to providers that will result if pdvWireless or another broadband licensee is in any way empowered to force incumbents out of their current positions in the Band.

Broadband licensees in the Band serve to reap immense benefits. In addition to the substantial windfall inherent in granting new broadband licenses (which, LADWP agrees, will likely carry much more value in the marketplace than narrowband licenses do), the one broadband licensee contemplated per county will become the *de facto* sole source provider if utilities wish to access broadband provided over the Band. This is particularly true in rural areas, where utilities already have to self-provision narrowband communications services due to the unavailability of commercial services.<sup>26</sup> Any broadband licensee stands to benefit greatly from being local utilities' only choice of broadband provider; the least those licensees can do in exchange is shoulder the financial burden imposed on incumbents in the course of realignment.

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<sup>24</sup> UTC Comments at 18; Oncor Comments at 7; pdvWireless Comments at 15.

<sup>25</sup> See pdvWireless Comments at 16-17 (asking the Commission to impose mandatory relocation on incumbents to address a hypothetical "holdout" problem.)

<sup>26</sup> See Oncor Comments at 3 ("Oncor's signal coverage in certain areas is more extensive than commercial carriers"); LCRA Comments at 5 ("LCRA operates and is expanding its utility facilities in rural areas where there often is a lack of reliable cellular coverage.")

The Commission should require potential broadband licensees to submit transition plans containing specific, detailed information about plans to protect and realign incumbents, including but not limited to specifics of:

- Advance replacements of lost narrowband frequency pairs,
- Temporary operations plans for narrowband operators, and
- Specific plans to provide utilities with access to broadband spectrum in the future.<sup>27</sup>

It should not be enough for broadband licensees to treat utilities as customers, nor should the Commission help them do so – utilities should be partners, and have the same opportunities as others already holding substantial blocks of spectrum in the Band.

#### **IV. BROADBAND LICENSES MUST BE AVAILABLE TO NARROWBAND INCUMBENTS, NOT JUST WIRELESS PROVIDERS.**

LADWP shares the concerns voiced by many in the record that the Commission's proposed broadband license eligibility requirements will have the effect of excluding utilities and other critical infrastructure providers from directly accessing broadband spectrum. Instead, it seems likely that many, if not most licenses, will exclusively be available to a single provider whose prior proposals form the basis of the NPRM.<sup>28</sup> While LADWP remains supportive of Commission efforts to increase spectrum efficiency and promote innovation in wireless technologies,<sup>29</sup> these goals are best served by maximizing spectrum availability, rather than simply shifting spectrum rights from one group of users to another.

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<sup>27</sup> See UTC Comments at 18-19.

<sup>28</sup> SCE Comments at 7; *see also* LCRA Comments at 19-20 (opposing eligibility rules that limit eligibility to SMR licensees); UTC Comments at 16-17 (objecting to an eligibility framework that effectively excludes B/ILT licensees from broadband license eligibility).

<sup>29</sup> See LADWP Comments at 1.

The Commission should ensure, in particular, that it does not require an unreasonably large preexisting spectrum portfolio to qualify for a broadband license. Proposed revisions to the eligibility requirements, such as those proposed by SCE and others, will ensure that the opportunities to develop broadband networks and technologies in the band are more equally and fairly distributed. A more open approach will also improve outcomes for the Commission by allowing market forces to push participants to provide the best proposal they can, consistent with the realities of utility procurement practices and operational needs. Utilities should be able to work together with wireless companies, or with one another, to develop creative solutions. A framework such as the one the Commission currently proposes is, as the record demonstrates, effectively picks a winner in advance by defining eligibility requirements so narrowly.

As described in the record by SCE, UTC, and others, utilities and other critical infrastructure companies are best positioned to understand their communications needs, and to integrate broadband services into their operations.<sup>30</sup> The Commission should empower these entities to continue their decades-long practice of self-provisioning their communications services in a manner most appropriate for their particular circumstances. This may include licensing on a smaller scale than county-level, as well. Smaller license areas may permit more flexibility in adapting incumbent operations to include both narrowband and broadband operations without disruption. This kind of flexibility and collaboration is a longstanding hallmark of the utility industry, yet is precisely the kind of service which wireless companies have thus far been unable to provide to meet the unique needs of utility providers. The Commission should not place utilities in a position of having no choice but to become customers of companies who do not meet their needs – self-sufficiency must be permitted, as well. Toward

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<sup>30</sup> See SCE Comments at 3, 8-10; LCRA Comments at 15-16.

that end, LADWP strongly supports the suggestion from SCE that narrowband incumbents be given some form of prioritized access to broadband spectrum, “over the possibility of ceding this small spectrum band to non-utilities for generalized broadband purposes that are already being served elsewhere.”<sup>31</sup>

## **V. OTHER MATTERS.**

The record reflects a great deal of agreement which should guide Commission action.

### ***A. Any Order Must Ensure No Or Limited Increase In The Noise Floor.***

LADWP shares the concerns of commenters that increase in the noise floor may result from co-channel or adjacent channel placement, as is particularly likely in congested markets where broadband licenses will be most valuable.<sup>32</sup> LADWP urges further study of this issue before any broadband license is issued.

### ***B. Any Order Must Provide A 500 Khz Guard Band .***

The 500 kHz guard band proposed by the Commission,<sup>33</sup> in contrast, receives wide support in the record, and LADWP shares the view of commenters who endorse this Commission effort to minimize interference potential.<sup>34</sup>

### ***C. The 800 Mhz Record Compels Caution With Respect To Costs And Timing.***

One area of concern for LADWP are proposals in the record which draw guidance from the 800 MHz rebanding process as an example to be followed here. While some aspects of the 800 MHz rebanding, such as those identified specifically by UTC,<sup>35</sup> may prove instructive, other

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<sup>31</sup> SCE Comments at 4.

<sup>32</sup> See UTC Comments at 13; Sensus Comments at 9.

<sup>33</sup> NPRM at ¶ 74.

<sup>34</sup> UTC Comments at 27.

<sup>35</sup> See NextEra Energy Comments at 19; UTC Comments at 27.

aspects of the rebanding process should give the Commission pause. In particular, the costs for 800 MHz rebanding have greatly exceeded original estimates;<sup>36</sup> the Commission should ensure that utilities are protected from the *actual* costs of realignment and repacking, not only those estimates endorsed by wireless providers, whose interest will inherently lie in minimizing those costs.

The record also reflects widespread opposition to any auction-based approach to allocating broadband licenses. Numerous commenters oppose the compulsory transitions which the Commission suggests would accompany these proposals, and the costs imposed on potential licensees from auction models would not only further limit utility access to licenses, but would consume resources which could otherwise be allocated to compensating incumbent operators for the costs imposed by the transition to broadband.

## **VI. CONCLUSION**

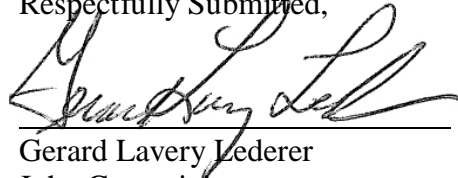
For the foregoing reasons, LADWP strongly urges the Commission to exercise all due care in considering the potential realignment of the band. A new framework where benefits flow to a limited group, while costs and burdens are borne by public serving utility incumbents with

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<sup>36</sup> See NextEra Energy Comments at 16-17.

vital public safety and critical infrastructure operational needs, is fundamentally at odds with the Commission's duty to manage spectrum resources to further the public interest.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Gerard Lavery Lederer", written over a horizontal line.

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